# BEFORE THE DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION OF THE STATE OF MONTANA

\* \* \* \* \* \* \*

# APPLICATION TO CHANGE WATER RIGHT ) NO. 76H 30158433 BY YC PROPERTIES LLC

# PRELIMINARY DETERMINATION TO GRANT CHANGE

1

\* \* \* \* \*

On September 26, 2022, YC Properties LLC (Applicant) submitted another Application to Change An Existing Irrigation Water Right No. 76H 30158433 to the Missoula Regional Office of the Department of Natural Resources and Conservation (Department or DNRC). The Department published receipt of the Application on its website on September 30, 2022. The Department did not send a deficiency letter as the application materials were the same as the previous application submitted for Claim 76H 2509-00. The Department contacted Lee Yelin of Water Rights, Inc. (consultant for the Applicant) on October 7, 2022 to determine if the Applicant was changing the place of use, as it appeared from the information in the change application materials that the Applicant was only adding a place of storage (see Work Copy IR.1.A dated October 7, 2022). The Applicant confirmed the application did not include a change in place of use. The Application was determined to be correct and complete as of December 12, 2022. An Environmental Assessment for this Application was completed on 2/29/2023.

# <u>INFORMATION</u>

The Department considered the following information submitted by the Applicant, which is contained in the administrative record.

#### Application as filed:

- Application to Change an Existing Irrigation Water Right, Form 606-IR
- Change in Place of Storage Addendum, Form 606-PSA
- Deficiency letter response for (withdrawn) Change Application 76H 30148401 dated 12/10/2020
- Attachments
  - Appendix A Project Maps & Aerial Findings Index, Pivot & Sprinkler Information, Notice of Letter to other users of Point of Diversion
  - Appendix B Site Visit Photo Plates & Maps
  - Appendix C Water Right Abstracts

- Appendix D Manning's Equation Worksheets
- Appendix E Painted Rocks Water Users Association Records
- Appendix F Place of Storage Addendum Form 606-PSA
- Appendix G Possessory Interest

#### Maps:

- Historic Project Map
- Proposed Project Map
- August 24, 1982 Conveyances Map (Map IR.2.C)
- July 16, 1979 Conveyances Map (Map IR.2.C)
- o Proposed Irrigated acreage for Claims 76H 2508-00 & 76H 2509-00 (Map IR.2.E)
- o Reservoir No.1 & No. 2 Form 606-PSA Map
- July 23, 1954 Aerial Photo Depicting Historical Irrigated Acreage
- September 24, 1954 Aerial Photo Depicting Historical Irrigated Acreage
- o August 2, 1963 Aerial Photo Depicting Historical Irrigated Acreage
- July 16, 1966 Aerial Photo Depicting Historical Irrigated Acreage
- July 16, 1979 Aerial Photo Depicting Historical Irrigated Acreage
- August 24, 1982 Aerial Photo Depicting Historical Irrigated Acreage
- July 17, 1990 Aerial Photo Depicting Historical Irrigated Acreage
- September 1, 1990 Aerial Photo Depicting Historical Irrigated Acreage
- July 31, 1995 Aerial Photo Depicting Historical Irrigated Acreage
- 1965 Ravalli County Water Resource Survey Map with Ownership
- Water Resource Survey Map showing Irrigated Areas
- Historical Diversion Measurement Location Map
- Projected Sprinkler Gun Layout Map
- Projected Pivot and Remaining Flood Irrigation Map

#### Information Received after Application Filed

 Work Copy page 2 of Form No. 606 IR dated October 7, 2022. See comment under IR.1.A regarding Applicant not changing Place of Use per conversation with Lee Yelin (Water Rights Inc.).

# Information within the Department's Possession/Knowledge

- 1958 Ravalli County Water Resources Survey maps, field notes, and aerial photos
- Montana Cadastral parcel and property information

- Sawtooth Creek and Canyon Creek surface water rights information
- Statement of Claim 76H 2509-00 file
- Files for Change Application Nos. 76H 30148402, 76H 30148403, 76H 30148404

The Department also routinely considers the following information. The following information is not included in the administrative file for this Application but is available upon request. Please contact the Missoula Regional Office at 406-721-4284 to request copies of the following documents.

- DNRC Historic Diverted Volume Standard Methodologies Memo, dated September 13, 2012
- DNRC Change in Method of Irrigation Memo, dated December 2, 2015
- DNRC Consumptive Use Methodology Memo, dated March 17, 2010
- DNRC Consumptive Use and Irrecoverable Loss Memo, dated April 15, 2013

The Department has fully reviewed and considered the evidence and argument submitted in this Application and preliminarily determines the following pursuant to the Montana Water Use Act (Title 85, chapter 2, part 3, part 4, MCA).

# **WATER RIGHT TO BE CHANGED**

#### FINDINGS OF FACT

- 1. On May 1, 2020, YC Properties LLC (Applicant) submitted Application to Change An Existing Irrigation Water Right No. 76H 2509-00 to the Missoula Regional Office of the Department of Natural Resources and Conservation (Department or DNRC). The Department published receipt of the Application on its website on May 4, 2020. The Department sent Applicant a deficiency letter under § 85-2-302, Montana Code Annotated (MCA), dated October 16, 2020. The Applicant responded with information dated December 13, 2020. The Application was withdrawn by the Applicant on September 22, 2022, as the Applicant failed to send out a Notice Letter to other water users who share the Point of Diversion appurtenant to this change application as required under § 85-2-302 (4)(c), Montana Code Annotated.
- 2. The Applicant is proposing to change Statement of Claim (Claim) 76H 2509-00 which is for 88 acres of flood irrigation from Canyon Creek, tributary to the Bitterroot River in Ravalli County. The claimed point of diversion (POD) for this right is the Iddings Ditch Headgate located in the NENENE of Section 29, T6N R21W, Ravalli County. The claimed flow rate is 336.6 gallons per minute (GPM) (0.75 cubic feet per second (CFS)). The place of use (POU) is in the NWNE Section 35, the NENW Section 35, and the SENW of Section 35, all in T6N R21W, Ravalli County.

The claimed period of diversion and use is April 15 to October 19. Individual elements of the water right proposed for change are shown in Table 1.

Table 1. Water right proposed for change

WR Number	Purpose	Flow Rate	Volume	Period of Use	Point of diversion	Place of use	Priority date	Acres
76H 2509-00	Irrigation	336.6 GPM	N/A	4/1- 10/19	NENENE, S29, T6N, R21W	NWNE, S35, T6N, R21W; NENW, S35, T6N, R21W; SENW, S35, T6N, R21W	6/1/1887	88

- 3. Claim 78H 2509-00 is diverted from Canyon Creek into the Iddings Ditch, which conveys water to Barley Creek. Barley Creek is used as a natural carrier to convey Canyon Creek water to a secondary point of diversion known by the Applicant as the Barley Creek Diversion Ditch (Barley Ditch), which is the same ditch used to convey the subject water right to its place of use.
- 4. Claim 76H 2508-00 lists Barley Creek (tributary to Sawdust Creek) as its source of supply and is entirely supplemental to Claim 76H 2509-00. The Applicant also filed an Application to Change an Existing Irrigation Water Right for Claim 76H 2508-00 (Change Application No. 76H 30148402), which is being processed concurrently with the subject application. Provisional Permit (Permit) 76H 72226-00 has a priority date of August 22, 1989 and is also (currently, not historically) supplemental to Claims 76H 2509-00 and 76H 2508-00 as portions of its place of use overlap with the 88 acres listed on Claim 76H 2509-00. This permit is for diversion of water from three groundwater wells for the purposes of domestic, stock and irrigation with a priority date of August 22, 1989. The place of use for irrigation consists of 120 acres of which approximately 65 acres overlaps the places of use for Claims 76H 2509-00. The elements of these supplemental water rights are summarized in Table 2 below.

Table 2. Supplemental water rights

WR Number	Flow Rate	Purpose	Period of Use	Place of Use	Point(s) of Diversion	Priority Date
Claim 76H 2508-00	3.33 CFS	Irrigation	4/15 - 10/19	NWNE, S35, T6N, R21W; NENW, S35, T6N, R21W; SENW, S35, T6N, R21W	NENWSW, S27, T6N, R21W	12/31/1881
Permit 76H 72226-00	340 GPM	Domestic, Stock & Irrigation	01/01 - 12/31 01/01 - 12/31 4/15 - 10/1	SENW, S35; NENW, S35; W2NWNE, S35, S2SESW, S26, T6N, R21W	3 Wells in the SWSENW, S35, T6N, R21W	8/22/1989

#### **CHANGE PROPOSAL**

# **FINDINGS OF FACT**

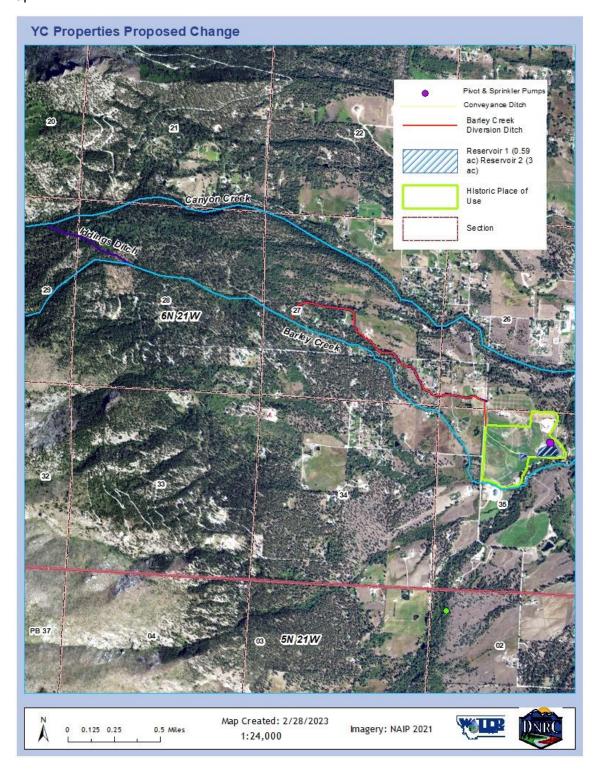
- 5. The Applicant is proposing to add two places of storage (Reservoir Nos. 1 & 2) to Claim 76H 2509-00. Reservoir No. 1 has a surface area of 0.59 acres, a capacity of 2.36 acre-feet (AF), and is located in the E2E2NW of Section 35, T6N R21W. Reservoir No. 2 has a surface area of 3 acres, a capacity of 28.5 AF, and is located in the S2NWNE of Section 35, T6N R21W. Both reservoirs were in existence prior to Department receipt of this application. After this change the Applicant will divert 336.6 GPM from Canyon Creek into the Iddings Ditch for continued irrigation of the historical place of use.
- 6. This change application is being processed concurrently with three other change applications as part of the Applicant's overall irrigation improvement project. Four separate change applications are required under the provisions of Administrative Rules of Montana (ARM) 36.12.1901(7), because upon completion of the proposed changes in water use the points of diversion, purposes, and places of use of the four subject water right will not be identical. The overall project involves eliminating one 5 AF capacity on-stream reservoir on Sawdust Creek (Change Application No. 76H 30148403), relocating a second 3.2 AF capacity reservoir and reducing its size, and reducing the surface area and capacity of an existing third 33.6 AF capacity reservoir. All three of these reservoirs were originally filled with water diverted from a groundwater well (Permit 76H 72226-00) and/or Sawdust Creek (Permit 76H 15711-00). The purpose of the reservoir relocation project is to improve the irrigation infrastructure on the Applicant's property by creating a centralized pumping reservoir for sprinkler irrigation. All the Applicant's

supplemental irrigation water rights associated with the historical place of use (including Claim 76H 2509-00) will utilize Reservoir No. 2 for irrigation pumping. The Applicant is not proposing to change the place of use or purpose of Claim 76H 2509-00. The Applicant's water rights and corresponding change applications related to the larger irrigation infrastructure improvement project are listed in Table 3 below. Map 1 shows the proposed elements of this change.

Table 3: Applicant's water rights and corresponding change applications

Water Right	Change Application submitted	Source	Туре
76H 2509-00	76H 30148402	Canyon Creek	Statement of Claim
76H 2508-00	76H 30158433	Barley Creek	Statement of Claim
76H 15711-00	76H 30148403	Sawdust Creek	Provisional Permit
76H 72226-00	76H 30148404	Groundwater	Provisional Permit

Map 1



# **CHANGE CRITERIA**

- 7. The Department is authorized to approve a change if the applicant meets its burden to prove the applicable § 85-2-402, MCA, criteria by a preponderance of the evidence. Matter of Royston, 249 Mont. 425, 429, 816 P.2d 1054, 1057 (1991); Hohenlohe v. DNRC, 2010 MT 203, ¶¶ 33, 35, and 75, 357 Mont. 438, 240 P.3d 628 (an applicant's burden to prove change criteria by a preponderance of evidence is "more probably than not."); Town of Manhattan v. DNRC, 2012 MT 81, ¶8, 364 Mont. 450, 276 P.3d 920. Under this Preliminary Determination, the relevant change criteria in § 85-2-402(2), MCA, are:
  - (2) Except as provided in subsections (4) through (6), (15), (16), and (18) and, if applicable, subject to subsection (17), the department shall approve a change in appropriation right if the appropriator proves by a preponderance of evidence that the following criteria are met:
  - (a) The proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued under part 3.
  - (b) The proposed means of diversion, construction, and operation of the appropriation works are adequate, except for: (i) a change in appropriation right for instream flow pursuant to 85-2-320 or 85-2-436; (ii) a temporary change in appropriation right for instream flow pursuant to 85-2-408; or (iii) a change in appropriation right pursuant to 85-2-420 for mitigation or marketing for mitigation.
  - (c) The proposed use of water is a beneficial use.
  - (d) The applicant has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use or, if the proposed change involves a point of diversion, conveyance, or place of use on national forest system lands, the applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water. This subsection (2)(d) does not apply to: (i) a change in appropriation right for instream flow pursuant to 85-2-320 or 85-2-436; (ii) a temporary change in appropriation right pursuant to 85-2-408 for mitigation or marketing for mitigation.
- 8. The evaluation of a proposed change in appropriation does not adjudicate the underlying right(s). The Department's change process only addresses the water right holder's ability to make a different use of that existing right. <u>E.g.</u>, <u>Hohenlohe</u>, at ¶¶ 29-31; <u>Town of Manhattan</u>, at ¶8; *In the Matter of Application to Change Appropriation Water Right No.41F-31227 by T-L Irrigation Company* (DNRC Final Order 1991).

# HISTORIC USE AND ADVERSE EFFECT

# FINDINGS OF FACT - Historic Use

- 9. Per ARM 36.12.1902(1)(a), historic information for a Statement of Claim must be described as it was used prior to July 1, 1973. The Department will only consider the supplemental relationship between Claim 76H 2509-00 and supplemental Claim 76H 2508-00 when assessing the historic use of the water right being changed, as Permit 76H 72226-00 was not in use until it was issued in 1989.
- 10. Claim 76H 2509-00 has a priority date of June 1, 1887, and a claimed period of diversion of April 15 October 19. The historical point of diversion is a headgate located in the NENENE Section 29, T6N, R21W, Ravalli County, and the historical means of conveyance is the Iddings Ditch. The Iddings Ditch delivers water from Canyon Creek approximately 2,650 feet until it reaches Barley Creek. Then, Barley Creek is used as a natural carrier to convey water to a secondary point of diversion at the Barley Ditch, and then to the place of use. The application materials state that water was usually diverted from Canyon Creek into the Iddings Ditch about April 15<sup>th</sup>, depending on weather, and continued till about June 30<sup>th</sup> as there wasn't enough water in Canyon Creek to keep Claim 76H 2509-00 in priority (76 days). After June 30<sup>th</sup>, only water diverted from Barley Creek with supplemental Claim 76H 2508-00 was conveyed in the Barley Ditch to irrigate the historic place of use appurtenant to this change.
- 11. Capacity of the Iddings Ditch diversion was calculated at a measuring box structure that diverts water directly from Canyon Creek into the Iddings Ditch. The Applicant provided Iddings Ditch diversion structure specifications indicating that the structure is 2 feet wide by 2 feet deep, as well as a Manning's roughness coefficient of 0.02. Based on this information the Iddings Ditch has a capacity of 4.95 CFS. The claimed flow rate for Claim 76H 2509-00 is 336.6 GPM (0.75 CFS). There are 17 water rights that use the Iddings Ditch as a means of conveyance with a combined total flow rate of 1,421.16 GPM (3.17 CFS), with Claim 76H 2509-00 supplying 23.68% of the total flow rate in the ditch while it is in priority. Based on this information, the Department finds the maximum historical flow rate for Claim 76H 2509-00 is 336.6 GPM.
- 12. The claimed place of use is 88 acres, including 37 acres in the NWNW, 30 acres in the NENW, and 21 acres in the SENW, all in Section 35, T6N, R21W, Ravalli County. A Department review of the Water Resource Survey (WRS) aerial photo (# CNR-1P-191) dated 7/21/1955, finds 71.9 acres were historically irrigated within the claimed place of use. A Department review of

USDA aerial photo (photo # 179-70) dated 8/2/1979, further supports the historical irrigation of 71.9 acres. Based on this information, the Department finds 71.9 acres were historically irrigated with Claim 76H 2509-00.

- 13. The Applicant elected to have the Department calculate historic consumptive use per ARM 36.12.1902(16). The historical method of irrigation was flood irrigation which used contour ditches and laterals to distribute water throughout the place of use. The weather station used for calculating historic consumptive use is the Hamilton weather station, which represents a similar elevation and is the closest station to the place of use. The seasonal evapotranspiration (ET) of flood irrigation for the area, as identified by the Irrigation Water Requirements program (IWR) is 19.93 inches. By applying the Ravalli County management factor for 1964 to 1973 of 79.5%, the adjusted ET is 15.84 inches or 1.32 feet. Therefore, the crop consumptive volume for the 71.9 irrigated acres is 94.9 AF (15.84 inches / 12 inches/foot x 71.9 acres = 94.9 AF). Table 4 identifies the variables used by the Department in this calculation.
- 14. The calculated field slope is approximately 2% from the highest point to the lowest point of irrigation. The Department applied an on-farm efficiency of 55% (contour ditch with design slope of 1.5-3.0%) for the historical flood irrigated field. On-farm efficiency refers to the percent of water delivered to the field that is used by the crop. Applying an on-farm efficiency of 55% to the 94.9 AF crop consumptive use leads to a field applied volume of 172.6 AF (94.9 AF / 55% = 172.6 AF).
- 15. For flood irrigation, the Department assumes 5% of the field application volume is consumed through irrecoverable losses. These losses account for evaporation of water delivered to the field but not used by the crop. The Department calculates that an additional 8.6 AF are consumed as non-crop related evaporative losses based on a field application volume of 172.6 AF (172.6 AF x 5% = 8.6 AF). The total historical consumed volume for the 71.9 acres is 103.5 AF. This is based on the historical use information provided by the Applicant and includes both crop and non-crop related consumptive uses.

Table 4. Calculated total consumption for historical POU

Ravalli County Flood/Sprinkler ET (Inches)	Ravalli County 1964-1973 Management Factor	Historic Acres	HCV AF (minus IL)	On-farm Efficiency	Field Application (AF)	Historic Irrecoverable Losses (IL) Flood 5% (AF)	HCV AF (Including IL)
19.93	79.5%	71.9	94.9	55%	172.6	8.6	103.5

- 16. According to the Applicant, irrigation of the 71.9-acre historical place of use with Claim 76H 2509-00 (0.75 CFS) and supplemental Claim 76H 2508-00 (3.33 CFS) typically began on April 15 and ceased by June 30 (76 days) once Claim 76H 2509-00 fell out of priority. Water from Canyon Creek was no longer conveyed to the place of use after this date, at which point irrigation of the historical place of use through October 19 was covered by supplemental Claim 76H 2508-00 only. According to information provided by the Applicant, flood irrigation ceased for two weeks, three times a year for haying. Once haying was complete, irrigation was operated at full service until water was limited or until a water commissioner lowered water use during years when a commissioner is appointed. Based on this information, both water rights were in priority from April 15 to June 30. During this period, Claim 76H 2509-00 provided 18.4% of the total amount of water historically applied to the field, based on the proportion of flow rates diverted with both water rights (4.08 CFS) to irrigate the historical place of use. The historical consumed (HCV) and field application volumes for the historical place of use during this period are 32.3 AF and 53.8 AF, respectively, based on monthly IWR values calculated using the NRCS IWR Program for the Hamilton weather station. After June 30 when supplemental Claim 76H 2508-00 provided 100% of all water applied to the historical place of use, a volume of 71.2 AF was consumed during irrigation, and the historical field application volume was 118.8 AF. Based on the percentages of irrigation water provided by Claim 76H 2509-00 earlier in the season and later in the season when the Claim is not in use, the historical consumed volume (HCV) including the irrecoverable losses that is attributable to the water right being changed is 5.9 AF (32.3 AF X 18.4% = 5.9 AF). The historic field application attributable to Claim 76H 2509-00 based on this same supplemental relationship is 9.9 AF (53.8 X 18.4% AF = 9.9 AF).
- 17. Pursuant to ARM 36.12.1902(10)(a), "conveyance losses" refer to the portion of water diverted at a headgate that does not arrive at an irrigated place of use. The annual ditch evaporation rate as recorded at the Hamilton weather station in Ravalli County is 3.24 feet (Potts, 1988), and the period-adjusted evaporation rate for a 76-day period of diversion (when Claim 76H 2509-00 is in priority) is 1.17 feet. The Iddings Ditch is 2,650 feet in length, and site soils below the flow level of the ditch are characterized as well drained gravelly coarse sandy loam by the NRCS SSURGO Web Soil Survey. Based on this information and per Figure 2-50 (NEH, 1993) in the DNRC's Historic Diverted Volume Standard Methodologies memorandum dated September 13, 2012, the ditch loss rate for the Iddings Ditch is 2.2 ft3/ft2/day. The ditch widths and wetted perimeters for the Iddings Ditch at the diversion structure near Canyon Creek and where the

Iddings Ditch joins Barley Creek were averaged and are 2.75 feet and 7.55 feet, respectively. Based on this information, total volume of conveyance losses in the Iddings Ditch during the 76 days (April 15 – June 30) when Claim 76H 2509-00 is in priority is 78.8 AF. The total flow rate diverted into the Iddings Ditch from Canyon Creek during this period is 3.17 CFS (per FOF 11). Claim 76H 2509-00 supply's 23.68% of the total flow rate in the ditch based on claimed flow rates. Based on these percentages the portion of conveyance losses in the Iddings Ditch attributed to Claim 76H 2509 is 18.7 AF (78.8 X 23.68%). The remaining 60.1 AF of historical conveyance losses in the Iddings Ditch during this period (and after Claim 76H 2509-00 falls out of priority) are attributed to the other water rights that list the ditch as a means of conveyance. By the time Claim 76H 2509-00 reaches the Barley Ditch, the flow rate of Claim 76H 2509-00 is 0.63 CFS (0.75 CFS - 0.12 CFS) due to conveyance losses in Iddings Ditch (18.7 AF / 76 days / 1.98 AF per CFS per day = 0.12 CFS). Table 5 summarizes the variables considered in the Department's assessment of conveyance losses for this period in the Iddings Ditch.

Table 5. Historical conveyance losses in Iddings Ditch from April 15 – June 30

Seepage Loss:	Ditch Wetted Perimeter (Feet)	Ditch Length (Feet)	Ditch Loss Rate (ft³/ft²/day)	Days Irrigated	Seepage Loss (/43,560)
	7.55	2650	2.2	76	76.8
Vegetation Loss:	% loss/mile	Flow Rate (CFS)	Days Irrigated	Ditch Length (miles)	Vegetation Loss (*2)
	0.0075	3.17	76	0.5	1.8
Ditch Evaporation:	Ditch Width (Feet)	Ditch Length (Feet)	Annual Evaporation (Potts)	Period Adjusted Evaporation	Ditch Evaporation (/43,560)
	2.75	2650	3.24	1.17	0.2

Historical Conveyance Losses when Claim 76H 2509-00 is in priority = 78.8 AF (76.8 AF + 1.8 AF + 0.2 AF)

18. Supplemental Claim 76H 2508-00 (3.33 CFS) and Claim 76H 147925-00 (0.28 CFS) also list the Barley Ditch as a means of conveyance. When Claim 76H 2509-00 reaches the secondary point of diversion at the Barley Ditch (4,404 feet in length), the total flow rate conveyed in the Barley Ditch is 4.24 CFS (3.61 CFS + 0.63 CFS). Table 6 summarizes the variables considered in the Department's assessment of conveyance losses in the Barley Ditch for this period. The annual ditch evaporation rate as recorded at the Hamilton weather station in Ravalli County is 3.24 feet (Potts, 1988), and the period-adjusted evaporation rate for a 76-day period of diversion is 1.17 feet. Site soils below the flow level of the Barley Ditch are characterized as well drained

gravelly coarse sandy loam by the NRCS SSURGO Web Soil Survey. Based on this information and per Figure 2-50 (NEH, 1993) in the DNRC's Historic Diverted Volume Standard Methodologies memorandum dated September 13, 2012, the ditch loss rate for the Barley Ditch is 2.2 ft3/ft2/day. The dimensions and wetted perimeters for the ditch at Waypoint 4 and the concrete splitter structure were averaged and are 2.44 feet and 9.9 feet, respectively. The conveyance losses in the Barley Ditch allocated to the individual rights based on a flow rate apportionment. For the 76-day period of diversion when Claim 76H 2509-00 is in priority, Claim 76H 2509-00 comprises 14.9 % of the 4.24 CFS flow rate in the ditch and, therefore, 14.9% of the 171.7-AF conveyance loss volume. The conveyance loss volume in the Barley Ditch that is attributable to the water right being changed during this period equals 25.6 AF. The remaining 146.1 AF of historical conveyance losses in the Barley Ditch during this period (and after Claim 76H 2509-00 falls out of priority) are attributed to the other water rights that list the ditch as a means of conveyance. Based on this information, the Department finds the total volume of historical conveyance losses in the Iddings Ditch and Barley Ditch attributed to Claim 76H 2509-00 is 44.3 AF (18.7 AF + 25.6 AF).

Table 6. Historical conveyance losses in Barley Ditch from April 15 – June 30

Seepage Loss:	Ditch Wetted Perimeter (Feet)	Ditch Length (Feet)	Ditch Loss Rate (ft³/ft²/day)	Days Irrigated	Seepage Loss (/43,560)
	9.9	4404	2.2	76	167.4
Vegetation Loss:	% loss/mile	Flow Rate (CFS)	Days Irrigated	Ditch Length (miles)	Vegetation Loss (*2)
	0.0075	4.24	76	0.8	4
Ditch Evaporation:	Ditch Width (Feet)	Ditch Length (Feet)	Annual Evaporation (Potts)	Period Adjusted Evaporation	Ditch Evaporation (/43,560)
	2.44	4404	3.24	1.17	0.3

Historical Conveyance Losses when Claim 76H 2509-00 is in priority = 171.7 AF (167.4 AF + 4 AF + 0.3 AF)

19. According to ARM 36.12.1902(10), historical diverted volume is equal to the sum of the field application volume and volume of conveyance losses. Based on the information provided in FOF Nos. 9 – 18, the Department finds the total historical diverted volume for Claim 76H 2509-00 is 54.2 AF (9.9 AF + 44.3 AF). Table 8 summarizes the historic use for Claim 76H 2509-00.

Table 8: Historical Use

Water Right Number	Flow Rate (CFS)	Diverted Volume (AF)	Consumed Volume (AF)	Period of Use	Points of Diversion	Place of Use
76H 2509-00	0.75	54.2	5.9	4/15 to 6/30	NENENE Sec 29, T6N, R21W	23.5 acres NWNE, 25.4 acres NENW, 23 acres SENW, Sec. 35, T6N R21W

# FINDINGS OF FACT - Adverse Effect

The purpose of this change is to add two irrigation places of storage to Claim 76H 2509-00; the flow rate, diverted volume, place of use, and point of diversion of this water right are not being changed. The Applicant will continue irrigating the historic 71.9-acre place of use with Claim 76H 2509-00 and supplemental Claim 76H 2508-00 after this change. Reservoir Nos. 1 & 2 will also be used as places of storage for two Provisional Permits and one other Claim (Permit 76H 72226-00 from groundwater, Permit 76H 15711-00 from Sawdust Creek, and Claim 76H 2508-00 from Barley Creek,). Initial fill and evaporative losses for the reservoirs are already included in the volumes authorized for Permit Nos. 76H 15711-00 and 76H 72226-00. Permit No. 76H 15711-00 has a year-round period of diversion for fisheries use in existing Reservoir Nos. 2 and 3. The fisheries purpose volume listed for this permit is 189.1 AF, and the place of use includes an onstream reservoir on Sawdust Creek and Reservoir Nos. 2 and 3. This volume is based off water measurements taken by the Applicant's predecessor prior to filing the Project Completion Notice and the Department verified this volume during processing of the Project Completion Notice for Change Authorization 76H 30012733 in 2007. Permit 76H 72226-00 also lists Reservoir Nos. 2 and 3 for the purpose of stock watering and irrigation storage and provides for evaporative losses of 11.9 AF from Reservoir No. 2 which was verified by the Department in 2002. Water from Canyon Creek with Claim 76H 2509-00 and Barley Creek with supplemental Claim 76H 2508-00 is not be stored in the reservoirs. Rather, Reservoir Nos. 1 and 2 will be used as a flow through system, with water from the Barley Ditch running into the reservoirs only when irrigation is actively occurring. The post-change period of diversion for Claim 76H 2509-00 is April 15 to October 19. The reservoirs will be used as pumping stations for irrigation, with the method of irrigation changing to sprinklers. Since the initial fill and evaporative losses are already covered with other active water right authorizations, there will be no increase in historical consumptive use associated with adding the proposed places of storage to Claim 76H 2509-00.

- 21. The point of diversion on Canyon Creek will not be altered in any way and the historical diverted flow rate will be the same, thereby not impacting other Canyon Creek water users. The existing concrete structure at the Applicant's property boundary will not be changed, and the Iddings and Barley Ditches will be operated as they were historically. The Applicant is the last user on the Barley Ditch, therefore is dependent on all upstream Canyon Creek and Barley Creek water users to receive their allocation of water.
- 22. The Department finds there will be no adverse effect to other water users resulting from the proposed change in place of storage under the terms and conditions set forth in this Preliminary Determination.

# **BENEFICIAL USE**

# **FINDINGS OF FACT**

- 23. The Applicant is not proposing to change the amount or flow rate of water historically used, and the point of diversion, place of use and purpose are not changing. The Applicant proposes to add two new reservoirs to Claim 76H 2509-00, consisting of Reservoir Nos. 1 and 2 located in the E2E2NW and S2NWNE of Section 35, T6N R21W, respectively. Reservoir No. 1 has a surface area of 0.59 acres, a depth of 8 feet, and a capacity of 2.36 AF. Reservoir No. 2 has a surface area of 3 acres, depth of 19 feet, and a capacity of 28.5 AF. These reservoirs will not be operated as true storage components to the water rights, but instead will be utilized to facilitate flow-through pumping for the Applicant's conversion to a sprinkler method of irrigation. The 71.9-acre historical place of use will continue being irrigated with both Claim 76H 2509-00 and supplemental Claim 76H 2508-00 after this change. Per FOF 20, no water from Claim 76H 2509-00 (or supplemental Claim 76H 2508-00) is required to fill or maintain reservoir levels, with the reservoirs being operated as true irrigation storage and fishery ponds for Permit Nos. 76H 72226-00 and 76H 15711-00. Reservoir No. 1 is connected to Reservoir No. 2 via a ditch that is 3 feet wide by 2 feet deep.
- 24. The Department finds the addition of two storage reservoirs to Claim 76H 2509-00 that will be used as flow-through reservoirs for irrigation water to be a beneficial use of water.

# **ADEQUATE DIVERSION**

#### FINDINGS OF FACT

- 25. The Applicant's current (and historical) diversion structure consists of a headgate on Canyon Creek. Based on the historical use information and conveyance dimensions provided by the Applicant, it is adequate to supply the claimed flow rate and volume. There will be no changes in means of diversion or conveyance of water to the place of use associated with this change. This headgate and ditch system has been in constant operation for over 100 years and the Applicant has the fourth right on Iddings Ditch and the most senior Barley Creek water right (supplemental Claim 76H 2508-00). While the method of irrigation on the place of use is changing, there is no proposed change to the location of irrigated acres or the place of use itself.
- 26. Canyon Creek water will continue being conveyed to the Barley Ditch via Barley Creek as a natural carrier of water in Section 35 until it reaches the historic place of use (Map 1). From here the water will be conveyed in a secondary ditch that runs southeasterly to Reservoir No. 1. Reservoir No. 1 is connected to Reservoir No. 2 via a 300 foot ditch. Reservoir No. 1 is proposed to be added to the subject water right because it is constructed on the historical field conveyance ditch prior to that ditch entering Reservoir No. 2. Reservoir No. 1 is a sediment trap designed to capture sediment and debris before water reaches Reservoir No. 2 and the irrigation pumps. The Applicant proposes to utilize secondary points of diversion consisting of two pumps in Reservoir No. 2 that will supply water to a new sprinkler irrigation system. A 20 HP pump will supply water to the center pivot irrigation system at a rate of 280 GPM to irrigate 50 acres. The pivot system consists of a 6-inch buried pipe that runs from Reservoir No. 2, 1,747 feet west to the pivot system. A 30 HP pump will supply water to wheel and hand line sprinklers at a flow rate of 330 GPM to irrigate the remaining 21.9 acres. This system consists of six 6-inch buried mainlines that convey water via 4-inch laterals to the wheel lines and hand lines which consist of 6 separate 60 X 40 sets of wheel line and hand lines. Each set has approximately 24 sprinklers with 13/64-inch diameter nozzles, which correspond to flow rates ranging from 8-10 GPM. In total, the flow rate of water that will be diverted through these reservoirs to irrigate the place of use is 610 GPM (1.35 CFS).
- 27. The Department finds the means of diversion, construction, and operation of the appropriation works are adequate for the beneficial use

# **POSSESSORY INTEREST**

# **FINDINGS OF FACT**

28. The Applicant signed the affidavit on the application form affirming the Applicant has possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use.

# **CONCLUSIONS OF LAW**

# HISTORIC USE AND ADVERSE EFFECT

29. Montana's change statute codifies the fundamental principles of the Prior Appropriation Doctrine. Sections 85-2-401 and -402(1)(a), MCA, authorize changes to existing water rights, permits, and water reservations subject to the fundamental tenet of Montana water law that one may change only that to which he or she has the right based upon beneficial use. A change to an existing water right may not expand the consumptive use of the underlying right or remove the well-established limit of the appropriator's right to water actually taken and beneficially used. An increase in consumptive use constitutes a new appropriation and is subject to the new water use permit requirements of the MWUA. McDonald v. State, 220 Mont. 519, 530, 722 P.2d 598, 605 (1986)(beneficial use constitutes the basis, measure, and limit of a water right); Featherman v. Hennessy, 43 Mont. 310, 316-17, 115 P. 983, 986 (1911)(increased consumption associated with expanded use of underlying right amounted to new appropriation rather than change in use); Quigley v. McIntosh, 110 Mont. 495, 103 P.2d 1067, 1072-74 (1940)(appropriator may not expand a water right through the guise of a change - expanded use constitutes a new use with a new priority date junior to intervening water uses); Allen v. Petrick, 69 Mont. 373, 222 P. 451(1924)("quantity of water which may be claimed lawfully under a prior appropriation is limited to that quantity within the amount claimed which the appropriator has needed, and which within a reasonable time he has actually and economically applied to a beneficial use. . . . it may be said that the principle of beneficial use is the one of paramount importance . . . The appropriator does not own the water. He has a right of ownership in its use only"); Town of Manhattan, at ¶ 10 (an appropriator's right only attaches to the amount of water actually taken and beneficially applied); Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, Order Re Petition for Judicial Review, Pg. 9 (2011)(the rule that one may change only that to which it has a right is a fundamental tenet of Montana water law and imperative to MWUA change provisions); In the Matter of Application to Change a Water Right No. 41I 30002512 by Brewer Land Co, LLC, DNRC Proposal For Decision and Final Order (2004).1

- 30. Sections 85-2-401(1) and -402(2)(a), MCA, codify the prior appropriation principles that Montana appropriators have a vested right to maintain surface and ground water conditions substantially as they existed at the time of their appropriation; subsequent appropriators may insist that prior appropriators confine their use to what was actually appropriated or necessary for their originally intended purpose of use; and, an appropriator may not change or alter its use in a manner that adversely affects another water user. Spokane Ranch & Water Co. v. Beatty, 37 Mont. 342, 96 P. 727, 731 (1908); Quigley, 110 Mont. at 505-11,103 P.2d at 1072-74; Matter of Royston, 249 Mont. at 429, 816 P.2d at 1057; Hohenlohe, at ¶¶43-45.²
- 31. The cornerstone of evaluating potential adverse effect to other appropriators is the determination of the "historic use" of the water right being changed. Town of Manhattan, at ¶10 (recognizing that the Department's obligation to ensure that change will not adversely affect other water rights requires analysis of the actual historic amount, pattern, and means of water use). A change applicant must prove the extent and pattern of use for the underlying right proposed for change through evidence of the historic diverted amount, consumed amount, place of use, pattern of use, and return flow because a statement of claim, permit, or decree may not include the beneficial use information necessary to evaluate the amount of water available for change or potential for adverse effect.<sup>3</sup> A comparative analysis of the historic use of the water right to the proposed change in use is necessary to prove the change will not result in expansion of the original right, or adversely affect water users who are entitled to rely upon maintenance of conditions on the source of supply for their water rights. Quigley, 103 P.2d at 1072-75 (it is necessary to ascertain historic use of a decreed water right to determine whether a change in use

<sup>&</sup>lt;sup>1</sup> DNRC decisions are available at:

http://www.dnrc.mt.gov/wrd/water\_rts/hearing\_info/hearing\_orders/hearingorders.asp

<sup>&</sup>lt;sup>2</sup> <u>See also Holmstrom Land Co., Inc., v. Newlan Creek Water District</u>,185 Mont. 409, 605 P.2d 1060 (1979); <u>Lokowich v. Helena</u>, 46 Mont. 575, 129 P. 1063(1913); <u>Thompson v. Harvey</u>, 164 Mont. 133, 519 P.2d 963 (1974)(plaintiff could not change his diversion to a point upstream of the defendants because of the injury resulting to the defendants); <u>McIntosh v. Graveley</u>, 159 Mont. 72, 495 P.2d 186 (1972)(appropriator was entitled to move his point of diversion downstream, so long as he installed measuring devices to ensure that he took no more than would have been available at his original point of diversion); <u>Head v. Hale</u>, 38 Mont. 302, 100 P. 222 (1909)(successors of the appropriator of water appropriated for placer mining purposes cannot so change its use as to deprive lower appropriators of their rights, already acquired, in the use of it for irrigating purposes); and, <u>Gassert v. Noyes</u>, 18 Mont. 216, 44 P. 959(1896)(change in place of use was unlawful where reduced the amount of water in the source of supply available which was subject to plaintiff's subsequent right).

<sup>&</sup>lt;sup>3</sup>A claim only constitutes *prima facie* evidence for the purposes of the adjudication under § 85-2-221, MCA. The claim does not constitute *prima facie* evidence of historical use in a change proceeding under §85-2-402, MCA. For example, most water rights decreed for irrigation are not decreed with a volume and provide limited evidence of actual historic beneficial use. §85-2-234, MCA

expands the underlying right to the detriment of other water user because a decree only provides a limited description of the right); Royston, 249 Mont. at 431-32, 816 P.2d at 1059-60 (record could not sustain a conclusion of no adverse effect because the applicant failed to provide the Department with evidence of the historic diverted volume, consumption, and return flow); Hohenlohe, at ¶44-45; Town of Manhattan v. DNRC, Cause No. DV-09-872C, Montana Eighteenth Judicial District Court, Order Re Petition for Judicial Review, Pgs. 11-12 (proof of historic use is required even when the right has been decreed because the decreed flow rate or volume establishes the maximum appropriation that may be diverted, and may exceed the historical pattern of use, amount diverted or amount consumed through actual use); Matter of Application For Beneficial Water Use Permit By City of Bozeman, Memorandum, Pgs. 8-22 (Adopted by DNRC Final Order January 9,1985)(evidence of historic use must be compared to the proposed change in use to give effect to the implied limitations read into every decreed right that an appropriator has no right to expand his appropriation or change his use to the detriment of juniors).<sup>4</sup>

32. An applicant must also analyze the extent to which a proposed change may alter historic return flows for purposes of establishing that the proposed change will not result in adverse effect. The requisite return flow analysis reflects the fundamental tenant of Montana water law that once water leaves the control of the original appropriator, the original appropriator has no right to its

<sup>&</sup>lt;sup>4</sup> Other western states likewise rely upon the doctrine of historic use as a critical component in evaluating changes in appropriation rights for expansion and adverse effect: Pueblo West Metropolitan District v. Southeastern Colorado Water Conservancy District, 717 P.2d 955, 959 (Colo. 1986)("[O]nce an appropriator exercises his or her privilege to change a water right ... the appropriator runs a real risk of requantification of the water right based on actual historical consumptive use. In such a change proceeding a junior water right ... which had been strictly administered throughout its existence would, in all probability, be reduced to a lesser quantity because of the relatively limited actual historic use of the right."); Santa Fe Trail Ranches Property Owners Ass'n v. Simpson, 990 P.2d 46, 55 -57 (Colo.,1999); Farmers Reservoir and Irr. Co. v. City of Golden, 44 P.3d 241, 245 (Colo. 2002)("We [Colorado Supreme Court] have stated time and again that the need for security and predictability in the prior appropriation system dictates that holders of vested water rights are entitled to the continuation of stream conditions as they existed at the time they first made their appropriation); Application for Water Rights in Rio Grande County, 53 P.3d 1165, 1170 (Colo. 2002); Wyo. Stat. § 41-3-104 (When an owner of a water right wishes to change a water right ... he shall file a petition requesting permission to make such a change .... The change ... may be allowed provided that the quantity of water transferred ... shall not exceed the amount of water historically diverted under the existing use, nor increase the historic rate of diversion under the existing use, nor increase the historic amount consumptively used under the existing use, nor decrease the historic amount of return flow, nor in any manner injure other existing lawful appropriators.); Basin Elec. Power Co-op. v. State Bd. of Control, 578 P.2d 557, 564 - 566 (Wyo, 1978) (a water right holder may not effect a change of use transferring more water than he had historically consumptively used; regardless of the lack of injury to other appropriators, the amount of water historically diverted under the existing use, the historic rate of diversion under the existing use, the historic amount consumptively used under the existing use, and the historic amount of return flow must be considered.)

use and the water is subject to appropriation by others. E.g., Hohenlohe, at ¶44; Rock Creek Ditch & Flume Co. v. Miller, 93 Mont. 248, 17 P.2d 1074, 1077 (1933); Newton v. Weiler, 87 Mont. 164, 286 P. 133(1930); Popham v. Holloron, 84 Mont. 442, 275 P. 1099, 1102 (1929); Galiger v. McNulty, 80 Mont. 339, 260 P. 401 (1927); Head v. Hale, 38 Mont. 302, 100 P. 222 (1909); Spokane Ranch & Water Co., 37 Mont. at 351-52, 96 P. at 731; Hidden Hollow Ranch v. Fields, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185; In the Matter of Application for Change Authorization No. G (W)028708-411 by Hedrich/Straugh/Ringer, DNRC Final Order (Dec. 13, 1991); In the Matter of Application for Change Authorization No. G(W)008323-G76l By Starkel/Koester, DNRC Final Order (Apr. 1, 1992); In the Matter of Application to Change a Water Right No. 411 30002512 by Brewer Land Co, LLC, DNRC Proposal For Decision and Final Order (2004); ARM 36.12.101(56)(Return flow - that part of a diverted flow which is not consumed by the appropriator and returns underground to its original source or another source of water - is not part of a water right and is subject to appropriation by subsequent water users).<sup>5</sup>

- 33. Although the level of analysis may vary, analysis of the extent to which a proposed change may alter the amount, location, or timing return flows is critical in order to prove that the proposed change will not adversely affect other appropriators who rely on those return flows as part of the source of supply for their water rights. Royston, 249 Mont. at 431, 816 P.2d at 1059-60; Hohenlohe, at ¶¶ 45-6 and 55-6; Spokane Ranch & Water Co., 37 Mont. at 351-52, 96 P. at 731. Noted Montana Water Law scholar Al Stone explained that the water right holder who seeks to change a water right is unlikely to receive the full amount claimed or historically used at the original place of use due to reliance upon return flows by other water users. Montana Water Law, Albert W. Stone, Pgs. 112-17 (State Bar of Montana 1994).
- 34. While evidence may be provided that a particular parcel was irrigated, the actual amount of water historically diverted and consumed is critical. <u>E.g.</u>, *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, DNRC Proposal for Decision adopted by Final Order (2005). The Department cannot assume that a parcel received the full duty of water or that it received sufficient water to constitute full-service irrigation for optimum plant growth. Even when it seems clear that no other rights could be affected solely by a particular change in the location

<sup>&</sup>lt;sup>5</sup> The Montana Supreme Court recently recognized the fundamental nature of return flows to Montana's water sources in addressing whether the Mitchell Slough was a perennial flowing stream, given the large amount of irrigation return flow which feeds the stream. The Court acknowledged that the Mitchell's flows are fed by irrigation return flows available for appropriation. Bitterroot River Protective Ass'n, Inc. v. Bitterroot Conservation Dist. 2008 MT 377, ¶¶ 22, 31, 43, 346 Mont. 508, ¶¶ 22, 31,43, 198 P.3d 219, ¶¶ 22, 31,43(citing Hidden Hollow Ranch v. Fields, 2004 MT 153, 321 Mont. 505, 92 P.3d 1185).

of diversion, it is essential that the change also not enlarge an existing right. <u>See MacDonald</u>, 220 Mont. at 529, 722 P.2d at 604; <u>Featherman</u>, 43 Mont. at 316-17, 115 P. at 986.

35. In Royston, the Montana Supreme Court confirmed that an applicant is required to prove lack of adverse effect through comparison of the proposed change to the historic use, historic consumption, and historic return flows of the original right. 249 Mont. at 431, 816 P.2d at 1059-60. More recently, the Montana Supreme Court explained the relationship between the fundamental principles of historic beneficial use, return flow, and the rights of subsequent appropriators as they relate to the adverse effect analysis in a change proceeding in the following manner:

The question of adverse effect under §§ 85-2-402(2) and -408(3), MCA, implicates return flows. A change in the amount of return flow, or to the hydrogeologic pattern of return flow, has the potential to affect adversely downstream water rights. There consequently exists an inextricable link between the "amount historically consumed" and the water that re-enters the stream as return flow. . . .

An appropriator historically has been entitled to the greatest quantity of water he can put to use. The requirement that the use be both beneficial and reasonable, however, proscribes this tenet. This limitation springs from a fundamental tenet of western water law-that an appropriator has a right only to that amount of water historically put to beneficial use-developed in concert with the rationale that each subsequent appropriator "is entitled to have the water flow in the same manner as when he located," and the appropriator may insist that prior appropriators do not affect adversely his rights.

This fundamental rule of Montana water law has dictated the Department's determinations in numerous prior change proceedings. The Department claims that historic consumptive use, as quantified in part by return flow analysis, represents a key element of proving historic beneficial use.

We do not dispute this interrelationship between historic consumptive use, return flow, and the amount of water to which an appropriator is entitled as limited by his past beneficial use.

# <u>Hohenlohe</u>, at ¶¶ 42-45 (internal citations omitted).

36. The Department's rules reflect the above fundamental principles of Montana water law and are designed to itemize the type evidence and analysis required for an applicant to meet its burden of proof. ARM 36.12.1901 through 1903. These rules forth specific evidence and analysis required to establish the parameters of historic use of the water right being changed. ARM 36.12.1901 and 1902. The rules also outline the analysis required to establish a lack of adverse effect based upon a comparison of historic use of the water rights being changed to the proposed use under the changed conditions along with evaluation of the potential impacts of the change on

other water users caused by changes in the amount, timing, or location of historic diversions and return flows. ARM 36.12.1901 and 1903.

37. Applicant seeks to change existing water rights represented by its Water Right Claims. The "existing water rights" in this case are those as they existed prior to July 1, 1973, because with limited exception, no changes could have been made to those rights after that date without the Department's approval. Analysis of adverse effect in a change to an "existing water right" requires evaluation of what the water right looked like and how it was exercised prior to July 1, 1973. In McDonald v. State, the Montana Supreme Court explained:

The foregoing cases and many others serve to illustrate that what is preserved to owners of appropriated or decreed water rights by the provision of the 1972 Constitution is what the law has always contemplated in this state as the extent of a water right: such amount of water as, by pattern of use and means of use, the owners or their predecessors put to beneficial use. . . . the Water Use Act contemplates that all water rights, regardless of prior statements or claims as to amount, must nevertheless, to be recognized, pass the test of historical, unabandoned beneficial use. . . . To that extent only the 1972 constitutional recognition of water rights is effective and will be sustained.

220 Mont. at 529, 722 P.2d at 604; see also Matter of Clark Fork River Drainage Area, 254 Mont. 11, 17, 833 P.2d 1120 (1992).

- 38. Water Resources Surveys were authorized by the 1939 legislature. 1939 Mont. Laws Ch. 185, § 5. Since their completion, Water Resources Surveys have been invaluable evidence in water right disputes and have long been relied on by Montana courts. In re Adjudication of Existing Rights to Use of All Water in North End Subbasin of Bitterroot River Drainage Area in Ravalli and Missoula Counties, 295 Mont. 447, 453, 984 P.2d 151, 155 (1999)(Water Resources Survey used as evidence in adjudicating of water rights); Wareing v. Schreckendgust, 280 Mont. 196, 213, 930 P.2d 37, 47 (1996)(Water Resources Survey used as evidence in a prescriptive ditch easement case); Olsen v. McQueary, 212 Mont. 173, 180, 687 P.2d 712, 716 (1984) (judicial notice taken of Water Resources Survey in water right dispute concerning branches of a creek).
- 39. While evidence may be provided that a particular parcel was irrigated, the actual amount of water historically diverted and consumed is critical. <u>E.g.</u>, *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, DNRC Proposal for Decision adopted by Final Order (2005). The Department cannot assume that a parcel received the full duty of water or that it received sufficient water to constitute full-service irrigation for optimum plant growth. Even when it seems clear that no other rights could be affected solely by a particular change in the location

of diversion, it is essential that the change also not enlarge an existing right. <u>See MacDonald</u>, 220 Mont. at 529, 722 P.2d at 604; <u>Featherman</u>, 43 Mont. at 316-17, 115 P. at 986; <u>Trail's End Ranch</u>, L.L.C. v. Colorado Div. of Water Resources 91 P.3d 1058, 1063 (Colo., 2004).

- 40. The Department has adopted a rule providing for the calculation of historic consumptive use where the applicant proves by a preponderance of the evidence that the acreage was historically irrigated. ARM 36.12.1902 (16). In the alternative an applicant may present its own evidence of historic beneficial use. In this case Applicant has elected to proceed under ARM 36.12.1902. (FOF No.13).
- 41. If an applicant seeks more than the historic consumptive use as calculated by ARM 36.12.1902 (16), the applicant bears the burden of proof to demonstrate the amount of historic consumptive use by a preponderance of the evidence. The actual historic use of water could be less than the optimum utilization represented by the calculated duty of water in any particular case. E.g., Application for Water Rights in Rio Grande County 53 P.3d 1165 (Colo., 2002) (historical use must be quantified to ensure no enlargement); In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC., supra; Orr v. Arapahoe Water and Sanitation Dist. 753 P.2d 1217, 1223 -1224 (Colo., 1988)(historical use of a water right could very well be less than the duty of water); Weibert v. Rothe Bros., Inc., 200 Colo. 310, 317, 618 P.2d 1367, 1371 1372 (Colo. 1980) (historical use could be less than the optimum utilization "duty of water").
- 42. Based upon the Applicant's evidence of historic use, the Applicant has proven by a preponderance of the evidence the historic use of Water Right Claim No. 76H 2509-00 of 54.2 AF diverted volume and 336.6 GPM (0.75 CFS) flow rate with a consumptive use of 5.9 acre-feet. (FOF Nos. 9—19)
- 43. Based upon the Applicant's comparative analysis of historic water use and return flows to water use and return flows under the proposed change, the Applicant has proven that the proposed change in appropriation right will not adversely affect the use of the existing water rights of other persons or other perfected or planned uses or developments for which a permit or certificate has been issued or for which a state water reservation has been issued. § 85-2-402(2)(b), MCA. (FOF Nos. 20—22)

# BENEFICIAL USE

- 44. A change applicant must prove by a preponderance of the evidence the proposed use is a beneficial use. §§ 85-2-102(4) and -402(2)(c), MCA. Beneficial use is and has always been the hallmark of a valid Montana water right: "[T]he amount actually needed for beneficial use within the appropriation will be the basis, measure, and the limit of all water rights in Montana . . ." McDonald, 220 Mont. at 532, 722 P.2d at 606. The analysis of the beneficial use criterion is the same for change authorizations under § 85-2-402, MCA, and new beneficial permits under § 85-2-311, MCA. ARM 36.12.1801. The amount of water that may be authorized for change is limited to the amount of water necessary to sustain the beneficial use. E.g., Bitterroot River Protective Association v. Siebel, Order on Petition for Judicial Review, Cause No. BDV-2002-519, Montana First Judicial District Court (2003) (affirmed on other grounds, 2005 MT 60, 326 Mont. 241, 108 P.3d 518); Worden v. Alexander, 108 Mont. 208, 90 P.2d 160 (1939); Allen v. Petrick, 69 Mont. 373, 222 P. 451(1924); Sitz Ranch v. DNRC, DV-10-13390, Montana Fifth Judicial District Court, Order Affirming DNRC Decision, Pg. 3 (2011)(citing BRPA v. Siebel, 2005 MT 60, and rejecting applicant's argument that it be allowed to appropriate 800 acre-feet when a typical year would require 200-300 acre-feet); Toohey v. Campbell, 24 Mont. 13, 60 P. 396 (1900)("The policy of the law is to prevent a person from acquiring exclusive control of a stream, or any part thereof, not for present and actual beneficial use, but for mere future speculative profit or advantage, without regard to existing or contemplated beneficial uses. He is restricted in the amount that he can appropriate to the quantity needed for such beneficial purposes."); § 85-2-312(1)(a), MCA (DNRC is statutorily prohibited from issuing a permit for more water than can be beneficially used).
- 45. Applicant proposes to add places of storage for irrigation which is a recognized beneficial use. § 85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence that irrigation is a beneficial use and that 53.9 acre-feet of diverted volume and 336.6 GPM (0.75 CFS) flow rate of water for irrigation is the amount needed to sustain the beneficial use § 85-2-402(2)(c), MCA (FOF Nos. 23—24)

# **ADEQUATE MEANS OF DIVERSION**

- 46. Pursuant to § 85-2-402 (2)(b), MCA, the Applicant must prove by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate. This codifies the prior appropriation principle that the means of diversion must be reasonably effective for the contemplated use and may not result in a waste of the resource. Crowley v. 6<sup>th</sup> Judicial District Court, 108 Mont. 89, 88 P.2d 23 (1939); In the Matter of Application for Beneficial Water Use Permit No. 41C-11339900 by Three Creeks Ranch of Wyoming LLC (DNRC Final Order 2002)(information needed to prove that proposed means of diversion, construction, and operation of the appropriation works are adequate varies based upon project complexity; design by licensed engineer adequate).
- 47. Pursuant to § 85-2-402 (2)(b), MCA, applicant has proven by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate for the proposed beneficial use. (FOF Nos. 25—27)

# **POSSESSORY INTEREST**

- 48. Pursuant to § 85-2-402(2)(d), MCA, the Applicant must prove by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. See also ARM 36.12.1802
- 49. The Applicant has proven by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. (FOF No. 28)

#### PRELIMINARY DETERMINATION

Subject to the terms and analysis in this Preliminary Determination Order, the Department preliminarily determines that this Application to Change Water Right No. 76H 30158433 should be granted subject to the following.

The Department determines the Applicant may add two places of storage for irrigation to Statement of Claim 76H 2509-00. The Applicant will continue diverting a flow rate of 0.75 CFS up to a volume of 54.2 AF from Canyon Creek using the Iddings Ditch headgate in the NENENE of Section 29, T6N R21W, Ravalli County. The new places of storage consist of a 2.36-AF capacity reservoir (Reservoir No. 1) in the E2E2NW of Section 35, T6N R21W, and a 28.5 AF-capacity reservoir (Reservoir No. 2) in the S2NWNE of Section 35, T6N, R21W. The period of diversion will be April 15 to October 19. The Applicant will continue to irrigate the 71.9-acre historically irrigated place of use.

# **NOTICE**

This Department will provide public notice of this Application and the Department's Preliminary Determination to Grant pursuant to § 85-2-307, MCA. The Department will set a deadline for objections to this Application pursuant to §§ 85-2-307, and -308, MCA. If this Application receives a valid objection, it will proceed to a contested case proceeding pursuant to Title 2 Chapter 4 Part 6, MCA, and § 85-2-309, MCA. If this Application receives no valid objection or all valid objections are unconditionally withdrawn, the Department will grant this Application as herein approved. If this Application receives a valid objection(s) and the valid objection(s) are conditionally withdrawn, the Department will consider the proposed condition(s) and grant the Application with such conditions as the Department decides necessary to satisfy the applicable criteria. E.g., §§ 85-2-310, -312, MCA.

DATED this 7th day of March 2023.

/Original signed by Jim Nave/ Jim Nave, Manager Missoula Regional Office Department of Natural Resources and Conservation

# **CERTIFICATE OF SERVICE**

This certifies that a true and correct copy of the PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this 7<sup>th</sup> day of March 2023, by first class United States mail.

YC PROPERTIES 1050 SATCOM LANE MELBOURNE, FL 32940

WATER RIGHTS INC ATTN: LEE YELIN PO BOX 9285 MISSOULA, MT 59807

Heather McAdams, (406) 542-5883